Appl. No.

10/717,045

Filed

•

November 19, 2003

AMENDMENTS TO THE CLAIMS

1. (Original) A basilar aneurysm occlusion device, comprising:

a radially expandable support structure, moveable between a reduced cross section for transluminal navigation and an enlarged cross section for retention within the basilar artery;

at least one axially extending link; and

a basilar aneurysm patch attached to the link, and moveable between a reduced cross section orientation and an implanted orientation;

wherein the patch resides in an axial orientation when in the reduced cross section orientation and a transverse orientation when in the implanted orientation.

- 2. (Original) A basilar aneurysm occlusion device as in Claim 1, wherein the support structure comprises a self expandable wire frame.
- 3. (Original) A basilar aneurysm occlusion device as in Claim 2, wherein the wire frame comprises a nickel titanium alloy.
- 4. (Original) A basilar aneurysm occlusion device as in Claim 1, wherein the patch comprises an expandable frame.
- 5. (Original) A basilar aneurysm occlusion device as in Claim 4, wherein the patch further comprises a membrane supported by the frame.
- 6. (Original) A basilar aneurysm occlusion device as in Claim 5, wherein the membrane comprises ePTFE.
- 7. (Original) A basilar aneurysm occlusion device as in Claim 5, wherein the membrane supports neointimal ingrowth.

Claims 8 through 23 (Cancelled)

- 24. (Original) A self expandable bifurcation aneurysm occlusion device, comprising:
- a tubular support structure having a proximal end, a distal end, and a longitudinal axis;
 - at least one strut extending distally from the support structure; and
 - a barrier carried by the strut.
- 25. (Original) A self expandable bifurcation aneurysm occlusion device as in Claim 24, wherein the barrier comprises a wire mesh.

Appl. No.

10/717,045

Filed

November 19, 2003

26. (Original) A self expandable bifurcation aneurysm occlusion device as in Claim 24, wherein the barrier comprises a polymeric membrane.

- 27. (Original) A self expandable bifurcation aneurysm occlusion device as in Claim 24, wherein the barrier, in an unconstrained expansion, resides in a plane which is transverse to the longitudinal axis.
- 28. (Original) A self expandable bifurcation aneurysm occlusion device as in Claim 26, wherein the membrane is porous.
 - 29. (Original) A device for obstructing the opening to an aneurysm, comprising:

a self expandable wire support, having a proximal end, a distal end and a tubular wall extending therebetween, the wall comprising a plurality of struts connected by bends;

an axially oriented opening at the proximal end of the support; a transverse barrier carried by the distal end of the support; and at least one lateral opening proximal to the transverse barrier.

- 30. (Original) A device for obstructing the opening to an aneurysm as in Claim 29, wherein the barrier is spaced distally apart from the distal end of the tubular wall.
- 31. (Original) A device for obstructing the opening to an aneurysm as in Claim 30, further comprising at least one link extending between the distal end of the tubular body and the barrier.
- 32. (Original) A device for obstructing the opening to an aneurysm as in Claim 31, comprising at least two axially extending links between the tubular body and the barrier.
- 33. (Original) A flow deflector, for implantation at a bifurcation in a vascular structure, comprising a support structure for positioning in a main vessel proximal to the bifurcation, the support structure having a proximal end, a distal end, and a longitudinal axis, and a flow deflection surface carried by the support structure, the flow deflection surface extending transversely across the longitudinal axis.
- 34. (Original) A flow deflector as in Claim 33, wherein the flow deflection surface is a surface of a wire mesh.
- 35. (Original) A flow deflector as in Claim 33, wherein the flow deflection surface is a surface of a polymeric membrane.

Appl. No.

: 10/717,045

Filed

November 19, 2003

Claims 36 through 39 (Cancelled)

40. (Original) An embolic coil for treating an aneurysm, comprising:

at least one embolic microcoil,

a support, for retaining the microcoil in an aneurysm; and

a strut, connecting the microcoil to the support.

- 41. (Original) An embolic coil as in Claim 40, wherein the support is integrally formed with the microcoil.
- 42. (Original) An embolic coil as in Claim 40, wherein the support is in contact with the microcoil.
- 43. (Original) An embolic coil as in Claim 40, wherein the support comprises a self expandable wire structure.
- 44. (Original) An embolic coil as in Claim 43, wherein the self expandable wire structure has a longitudinal axis, and the microcoil is held by the support in a position which intersects the longitudinal axis.
- 45. (Original) An embolic coil as in Claim 40, wherein the strut comprises an extension of the support.